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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)
5490-000350

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On February 1, 2007Signature Typed or printed name Richard W. Warner

Application Number

10/680,902Filed
October 8, 2003First Named Inventor
John M. CUCKLER et al.Art Unit
3733Examiner
James L. Swiger

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

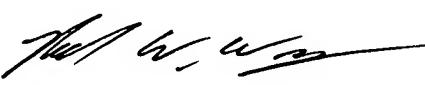
This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

applicant/inventor


Signature

assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is
enclosed. (Form PTO/SB/96)

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Registration number if acting under 37 CFR 1.34

February 1, 2007

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

*Total of forms are submitted.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/680,902
Filing Date: October 8, 2003
Applicant: John M. CUCKLER et al.
Group Art Unit: 3733
Examiner: James L. Swiger
Title: BONE-CUTTING APPARATUS
Attorney Docket: 5490-000350

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

REASONS/REMARKS/ARGUMENTS WITH PRE-APPEAL BRIEF REQUEST FOR REVIEW

SUMMARY

Applicants submit that there is a clear error in the *prima facie* case of the rejections made in the Office Action mailed December 1, 2006. Specifically, the rejections included in the Office Action fail to account for at least one element required in each of the rejected claims.

STATUS OF THE CLAIMS

The claims stand as amended in the Amendment filed on September 5, 2006. In the Final Office Action mailed on December 1, 2006, claims 5-9 and 11-16 are allowed, and claims 1-4, 10 and 26-33 stand rejected. Claims 1-2, and 26-31 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Bastian et al (U.S. Pat. No. 5,769,854). Claims 3-4, and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bastian et al in view of Coleman (U.S. Pat. No. 5,591,207). Claims 32-33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bastian et al in view of Dietz et al. (U.S. Pat. No. 5,653,714). Of the rejected claims, claims 1, 10, 26, and 29 are independent claims.

REMARKS AND ARGUMENTS

Failure to establish *prima facie* case of rejection for independent claims 1, 10, 26, and 29 because at least one limitation is identified as missing.

Regarding the rejections of claims 1-2, and 26-31 under 35 U.S.C. § 102(b), we note that to anticipate a claim the reference must teach every element of the claim. MPEP §2131, Eight

Edition, August 2006. Regarding the rejections of claims 3-4, 10, and 32-33 under 35 U.S.C. § 103(a), we note that to establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP §2143, Eight Edition, August 2006.

Applicants respectfully submit that the references used for the rejections of claims 1-4, 10, and 26-33 fail to disclose at least one element of each rejected claim. In particular, Applicants submit that the rejections fail to properly account for at least the limitations “mill pivotable about a lateral axis”, and “rotatable mill”. The Final Office Action relies on Bastian et al to provide the limitations of a “rotatable mill” and “mill pivotable about a lateral axis” of the guide opening. Therefore, only this reference is discussed regarding these limitations.

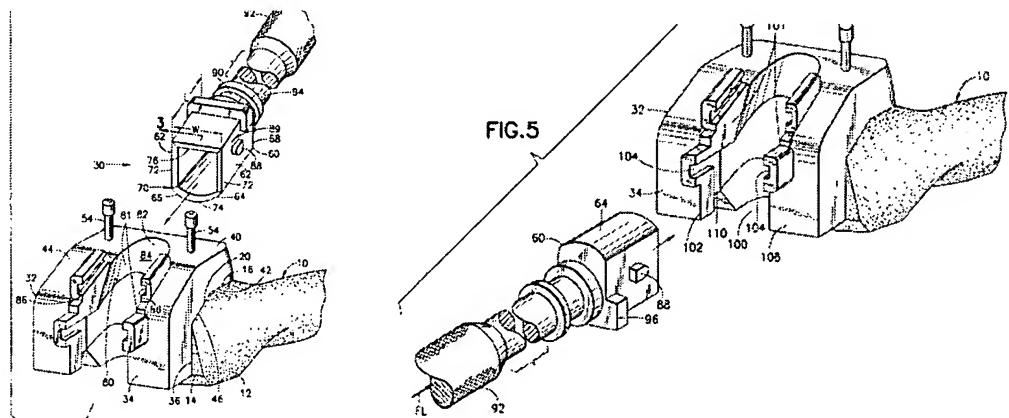
Limitation: mill pivotable about lateral axis

In each of the independent claims 1, 10, 26 and 29, the element that the mill is pivotable about the lateral axis (the lateral axis being a lateral axis of the opening of the guide) is not disclosed by Bastian et al, as applied to independent claims 1, 26 and 29, nor by Bastian et al in view of Coleman, as applied to independent claim 10. Relevant arguments have been presented in the Amendment filed on 9/5/2006, p. 9.

In response to those arguments, the Final Office Action mailed on December 1, 2006 states that “examiner submits that a lateral axis may be drawn at least across the box cut formed by the guide, also allowing the rotatable mill to pivot around it in at least a plurality of planes”. As can be surmised by the detailed rejections in the Final Office Action, these remarks of the Examiner are made in reference to Bastian et al.

As Applicants discussed in the Amendment filed on 9/5/2006, p. 9, Bastian et al discloses a cutting punch 60 having a cutting edge 70, as shown below in FIGS. 3 and 5. The cutting

punch 60 is not pivotable at all relative to the guide 32. The punch is “inserted into the first channel 80, with the splines 88 engaging complementary grooves 86” as shown in Figs. 2 and 3, and then retracted and removed from the first channel 80. See line 66, column 3, to line 25, column 4. The process is then repeated with a second channel 100. See Figures 5 and 7, column 4, lines 35-60. The splines 88 are inserted in the grooves 104, constraining the punch 60 from pivoting. Grooves 104 communicate with grooves 110 allowing the punch to be removed downwardly, as shown in FIG. 7. The cutting punch 60 is not a mill and is not pivoted about a lateral axis of the opening of the guide 32 or any other axis whatsoever. On the contrary, the cutting punch 60 is constrained in the lateral direction of the channel 80 or 100 between pairs of grooves 86 or 104 110 defined on the sides of the respective channels to provide only a constrained linear movement that cannot pivot at all.



Limitation: rotatable mill

Further, each of the independent claims 1, 10, 26, and 29, requires that the mill is rotatable. Bastian et al does not disclose a rotatable mill whatsoever. Bastian et al only discloses a cutting punch 60 having a cutting edge 70, and not a rotatable mill. The cutting punch has a handle 92. An axial force FT is applied on the handle 92 to move the punch axially, as shown in Figs. 3 and 4. The punch 60 can also be moved in the direction of the arrows shown in FIGS. 5

and 7 in a translational motion along the grooves 86 of channel 80 or along the grooves 104 or 110 of channel 100. In fact the punch 60 is prevented from rotating by use of the splines 88 that are engaged in the grooves. Therefore, the punch is not a rotatable mill and no other rotatable mill whatsoever is disclosed.

Further Arguments for independent claims 1, 10 and 26

Regarding independent claim 1, Bastian et al fails to disclose the additional limitations that the mill is slidably adjustable along the lateral axis, about which is the mill is pivotable, as discussed above. Regarding independent claim 26, Bastian et al fails to disclose the additional limitations that the mill can be shifted along the lateral axis, about which is the mill is pivotable, as discussed above. On the contrary, Bastian et al discloses a cutting punch 60 that is received in either a first channel 80 or a second channel 100 and is constrained from movement in the lateral direction relative to the respective channels by a spline-and-groove engagement (grooves 86, 104 or 110), such that the cutting punch 60 can only be advanced in a linear slidable direction along pairs of opposing grooves on the sides of each channel, while constrained between the opposing grooves from pivoting.

Regarding independent claim 10, the Final Office Action combines Bastian et al with Coleman. Applicants have already argued that these references are not combinable. See Amendment mailed 9/5/06, page 10. Coleman is directed to a drilling system for inserting threaded anchors. Coleman appears to disclose detent grooves 202 along a shaft to provide a constraint against motion in the longitudinal direction. Bastian et al does not allow motion along any rotatable shaft whatsoever that could benefit from the detent grooves. Without impermissible hindsight provided by Applicants' teachings, Bastian et al cannot be combined with Coleman. Further, the teachings of Coleman do not provide a solution to the problem

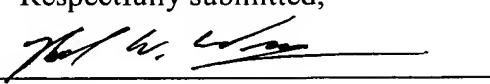
solved by additional elements of claim 10, namely the slideable and constrained motion combinations recited in claim 10 and described below. Even assuming, without admitting, that Bastian et al is combinable with Coleman, the combination still fails to provide all the additional elements of claim 10 discussed below.

Coleman discloses a driver shaft 200 for inserting an anchor 108 into a bone 142. The shaft includes detent grooves 202 that receive a snap collet 204 or snap ring 206 for discrete depth penetration adjustments. The grooves 202 are not truncated. When the snap collet or ring engages the grooves, penetration stops, period. In contrast, claim 10 recites that the mill is slidably adjustable along the lateral axis in a first position, which is parallel to the base, and constrained in the other positions that are at an angle relative to the base by a pin engaging one of the truncated grooves. If the grooves are not truncated, this is not possible. Further, Coleman (or Bastian et al) fails to disclose such a pin, which is perpendicular to the base of the guide.

Conclusion

Applicants respectfully submit that the standing rejections maintained by the Examiner in the Final Office Action mailed 12/1/2006 fail to establish the necessary *prima facie* case of rejection. Applicants respectfully request that the Panel review the rejections and direct the Examiner to withdraw each rejection as clearly erroneous.

Dated: Feb. 1, 2007

Respectfully submitted,
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